

## **Tuberculosis Morbidity— United States, 1998**

[Adapted from MMWR 1998:48(33):732-36]

## Progress Toward the Elimination of Tuberculosis — United States, 1998

In 1998, a total of 18,361 tuberculosis (TB) cases were reported from the 50 states and the District of Columbia, a decrease of 8% from 1997 and 31% from 1992, the height of the TB resurgence in the United States. The 1998 rate of 6.8 per 100,000 population was 35% lower than in 1992 (10.5) but remained above the national goal for 2000 of 3.5 (Table 1). This report summarizes national TB surveillance data for 1998 and compares them with similar data from previous years. The findings indicate that the overall number of TB cases continued to decrease, and that trends in the number of reported cases and TB incidence varied by geographic area and population characteristics.

All states reported at least one case in 1998, and 18 states reported <100 cases. Among the states reporting <100 cases in 1998, 17 reported <100 cases in 1992, and 14 had no change or a decrease in the number of reported cases in 1998 compared with 1992 (Table 1). Among all states, the proportion of counties reporting no TB cases increased from 42% in 1992 to 49% in 1998; these counties represented 11% of the total U.S. population in 1998. The 1998 TB rate in 19 states was lower than the 2000 national goal.

California, Florida, Illinois, New York, and Texas reported the highest number of cases in 1998 and represented 54% of all reported TB cases. During 1992–1998, the five states observed a marked decrease in the number of new cases and together accounted for 68% of the overall decrease. The four cities with the highest number of TB cases were New York (1558), Los Angeles (544), Chicago (473), and Houston (424). The number of reported cases in all four cities decreased between 1992 and 1998: 59% in New York, 51% in Los Angeles, and 41% in Chicago and Houston, and together these cities accounted for 41% of the overall decline in the number of reported TB cases in the United States.

The number of reported TB cases in 1998 compared with 1992 decreased in both sexes and all age groups at varying rates (Table 2). The largest decrease occurred among children aged <15 years and adults aged 25–44 years. During 1992–1998, the number of cases in U.S.-born persons decreased 44%, and the number of cases in foreign-born persons increased 4%. The proportion of TB cases among foreign-born persons steadily increased, from 27% in 1992 to 42% in 1998. The TB rate in foreign-born persons remained approximately four to six times higher than for U.S.-born persons. In 1998, among the 7591 TB cases in foreign-born persons, the birth countries with the highest number of cases were Mexico with 1757 (23%), Philippines with 968 (13%), and Vietnam with 748 (10%).

In 1993, CDC began to collect drug susceptibility results for initial *Mycobacterium tuberculosis* isolates on the TB case report. During 1998, results were reported for 91% (13,477 of 14,830 culture-positive cases). Overall, 1086 (8.1%) case-patients had isolates resistant to at least isoniazid, and 150 (1.1%) had isolates resistant to at least isoniazid and rifampin (i.e., multidrug-resistant TB [MDR-TB]); New York (38) and California (36) reported 49% of the MDR-TB cases. During 1993–1998, resistance to isoniazid decreased slightly (from 8.9% in 1993), and MDR-TB decreased markedly (from 2.8% in 1993). The decrease in MDR-TB reflected declines from 2.7% to 0.7% in U.S.-born persons and from 3.0% to 1.6% in foreign-born persons. As a result, the proportion of MDR-TB cases among foreign-born persons increased from 31% in 1993 to 61% in 1998. Forty-five states and the District of Columbia reported at least one MDR-TB case during 1993–1998.

TABLE 1. Number of reported tuberculosis cases, percentage change in number of cases, and case rates\*, by state and year: United States, 1992 and 1998

	No. Cases		% Change from	Rate	
State	1992	1998	1992 to 1998	1992	1998
Alabama	418	381	-9%	10.1	8.8
Alaska	57	55	-4%	9.7	9.0
Arizona	259	254	-2%	6.8	5.4
Arkansas	257	171	-33%	10.7	6.7
California	5,382	3,852	-28%	17.4	11.8
Colorado	104	79	-24%	3.0	2.0
Connecticut	156	128	-18%	4.8	3.9
Delaware	55	36	-35%	8.0	4.8
District of Columbia	146	107	-27%	24.8	20.5
Florida	1,707	1,302	-24%	12.7	8.7
Georgia	893	631	-29%	13.2	8.3
Hawaii	273	181	-34%	23.5	15.2
Idaho	26	14	-34 % -46%	2.4	1.1
Illinois	1,270	850	-33%	10.9	7.1
	1,270 247				3.2
Indiana		188	-24%	4.4	
lowa	49 56	55 56	12%	1.7	1.9
Kansas	56	56 470	0%	2.2	2.1
Kentucky	402	179	-55%	10.7	4.5
Louisiana	373	380	2%	8.7	8.7
Maine	24	13	-46%	1.9	1.0
Maryland	442	324	-27%	9.0	6.3
Massachusetts	428	282	-34%	7.1	4.6
Michigan	495	385	-22%	5.2	3.9
Minnesota	165	161	-2%	3.7	3.4
Mississippi	281	225	-20%	10.7	8.2
Missouri	245	184	-25%	4.7	3.4
Montana	16	20	25%	1.9	2.3
Nebraska	28	31	11%	1.7	1.9
Nevada	99	128	29%	7.5	7.3
New Hampshire	18	14	-22%	1.6	1.2
New Jersey	984	640	-35%	12.6	7.9
New Mexico	88	68	-23%	5.6	3.9
New York	4,574	2,000	-56%	25.2	11.0
North Carolina	604	498	-18%	8.8	6.6
North Dakota	11	10	-9%	1.7	1.6
Ohio	358	230	-36%	3.2	2.1
Oklahoma	216	198	-8%	6.7	5.9
Oregon	145	156	8%	4.9	4.8
Pennsylvania	758	448	-41%	6.3	3.7
Rhode Island	54	63	17%	5.4	6.4
South Carolina	387	286	-26%	10.7	7.5
South Dakota	32	23	-28%	4.5	7.5 3.1
Tennessee	527	439	-20 <i>%</i> -17%	10.5	8.1
Texas	2,510	1,820	-17% -27%	14.2	9.2
Utah	2,510 78	1,820 52	-27% -33%	4.3	9.2 2.5
Vermont	7	5	-29% 26%	1.2	0.8
Virginia Washington	457	339	-26%	7.2	5.0
Washington	306	265	-13%	6.0	4.7
West Virginia	92	42	-54%	5.1	2.3
Wisconsin	106	109	3%	2.1	2.1
Wyoming	8	4	-50%	1.7	0.8
Total	26,673	18,361	-31%	10.5	6.8

<sup>\*</sup>Per 100,00 population

TABLE 2. Number of reported tuberculosis cases, percentage change in number of cases, and rates\*, by sex, age, and year - United States, 1992-1998

_	No. reported cases		% Change from	Rate	
Characteristic	1992	1998	1992 to 1998	1992	1998
Sex <sup>†</sup>					
Male	17,433	11,413	-34.5%	14.0	8.6
Female	9,236	6,935	-24.9%	7.1	5.0
Age group (yrs) <sup>†</sup>					
0-14	1,707	1,082	-36.6%	3.1	1.9
15-24	1,974	1,548	-21.6%	5.5	4.2
25-44	10,444	6,365	-39.1%	12.7	7.6
45-64	6,487	4,973	-23.3%	13.4	8.7
<u>≥</u> 65	6,025	4,393	-27.1%	18.7	12.8
Total	26,673	18,361	-31.2%	10.5	6.8

<sup>\*</sup>Per 100,000 population

In 1993, CDC began collecting information about human immunodeficiency virus (HIV) status on TB case reports; 48 states submit HIV test results on TB case reports. In 1998, 3509 (55%) of 6365 TB case reports for persons aged 25–44 years included information about HIV status, an increase from 1993 when 33% had HIV status. Among the states with information for ≥75% of the cases in this age group, the proportion of TB cases in HIV-infected persons ranged from 0% (Montana, North Dakota, Vermont, and Wyoming) to 47% (Florida).

## Reference

Centers for Disease Control and Prevention. Progress Toward the Elimination of Tuberculosis. MMWR 1999:48(33):732-36.

## For More Information

To find out more about TB, call your state health department. You may also call CDC's Voice and Fax Information System at 1-888-CDC-FACT (232-3228) or you may visit the Division of TB Elimination's Web site at www.cdc.gov/nchstp/tb.

<sup>†</sup>Persons for whom sex (four in 1992 and 13 in 1998) and age (36 in 1992) were not stated were excluded.